

PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

Print Form

EFD 15-10
201210

DEPARTMENT Biomedical Engineering

EFFECTIVE SESSION Fall 2011

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

- | | |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> 1. New course with supporting documents | <input type="checkbox"/> 7. Change in course attributes (department head signature only) |
| <input type="checkbox"/> 2. Add existing course offered at another campus | <input type="checkbox"/> 8. Change in instructional hours |
| <input type="checkbox"/> 3. Expiration of a course | <input type="checkbox"/> 9. Change in course description |
| <input type="checkbox"/> 4. Change in course number | <input type="checkbox"/> 10. Change in course requisites |
| <input type="checkbox"/> 5. Change in course title | <input type="checkbox"/> 11. Change in semesters offered (department head signature only) |
| <input type="checkbox"/> 6. Change in course credit/type | <input type="checkbox"/> 12. Transfer from one department to another |

PROPOSED:

Subject Abbreviation BME
Course Number 29000
Long Title Frontiers in Biomedical Engineering
Short Title Frontiers in BME

EXISTING:

Subject Abbreviation _____
Course Number _____
Long Title _____
Short Title _____

TERMS OFFERED

Check All That Apply:

- Summer Fall Spring

CAMPUS(ES) INVOLVED

- Calumet N. Central
 Cont Ed Tech Statewide
 Ft. Wayne W. Lafayette
 Indianapolis

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

CREDIT TYPE

1. Fixed Credit: Cr. Hrs. 1
2. Variable Credit Range:
Minimum Cr. Hrs. _____
(Check One) To Or
Maximum Cr. Hrs. _____
3. Equivalent Credit: Yes No

COURSE ATTRIBUTES: Check All That Apply

1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
Maximum Repeatable Credit:
4. Credit by Examination
5. Special Fees
6. Registration Approval Type
Department Instructor
7. Variable Title
8. Honors
9. Full Time Privilege
10. Off Campus Experience

Schedule Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated
Lecture	50	1	16	_____
Recitation	_____	_____	_____	_____
Presentation	_____	_____	_____	_____
Laboratory	_____	_____	_____	_____
Lab Prep	_____	_____	_____	_____
Studio	_____	_____	_____	_____
Distance	_____	_____	_____	_____
Clinic	_____	_____	_____	_____
Experiential	_____	_____	_____	_____
Research	_____	_____	_____	_____
Ind. Study	_____	_____	_____	_____
Pract/Observ	_____	_____	_____	_____

CROSS-LISTED COURSES
RECEIVED
AUG - 9 AM 9:44

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

Major Restriction: BME Only. This course introduces the rapidly emerging field of biomedical engineering by exposing students to a wide range of research activities in the Weldon School and to a variety of experiential learning opportunities. Topics addressed include career paths, professional development opportunities, and career development skills including creating a plan of study, informational and job interviewing, writing a resume, technical writing, preparing effective oral presentations, and peer-editing.

***COURSE LEARNING OUTCOMES:**

A student who successfully fulfills the course requirements will have demonstrated: an ability to independently acquire knowledge from a variety of sources, an ability to communicate effectively in written form, an ability to identify and describe contemporary issues impacting Biomedical Engineers, and an ability to identify and pursue a career development pathway that is relevant to their personal identity and their training as Biomedical Engineers

Calumet Department Head _____ Date _____	Calumet School Dean _____ Date _____
Fort Wayne Department Head _____ Date _____	Fort Wayne School Dean _____ Date _____
Indianapolis Department Head _____ Date _____	Indianapolis School Dean _____ Date _____
North Central Department Head _____ Date _____	North Central Chancellor _____ Date _____
<u>George R. Wodicka</u> 7/22/11 West Lafayette Department Head	<u>Michael J. ...</u> 7/22/11 West Lafayette College/School Dean
_____ Date _____	<u>Sandra Sheffer</u> 8/11/11 West Lafayette Registrar

TO: The Faculty of the College of Engineering

FROM: The Faculty of the School of Biomedical Engineering

RE: New Undergraduate Course, BME 29000, Frontiers in Biomedical Engineering

The Faculty of the School of Biomedical Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

BME 29000 Frontiers in Biomedical Engineering

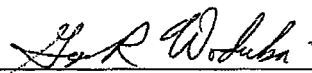
Term offered: Fall, Lecture 1, Cr. 1

Restriction: Must be enrolled in the School of Biomedical Engineering (BME)

Description: This course introduces the rapidly emerging field of biomedical engineering by exposing students to a wide range of research activities in the Weldon School and to a variety of experiential learning opportunities. Topics addressed include career paths, professional development opportunities, and career development skills including creating a plan of study, informational and job interviewing, writing a resume, technical writing, preparing effective oral presentations, and peer-editing.

Reason: This new course will be a required course for the undergraduate program in the Weldon School of Biomedical Engineering (BME). We feel it addresses a current need to expand the understanding and practical skills associated with professional development at an early stage. The course is structured to build on the FYE curriculum and to link with several other design and professional skills courses within the BME curriculum. This course will serve also as the introduction to the field of biomedical engineering allowing first semester sophomores to become more integrated into the School and prepare for internship opportunities. Currently there are no existing competing courses at Purdue that address these BME-specific topics.

The course has been taught 3 times previously as an experimental course. The course has been strongly recommended for all BME sophomores and will be required in the future.



 George R. Wodicka, Professor and Head
 Weldon School of Biomedical Engineering

APPROVED FOR THE FACULTY
 OF THE SCHOOLS OF ENGINEERING
 BY THE ENGINEERING
 CURRICULUM COMMITTEE

ECC Minutes #17
 Date 4-20-11
 Chairman ECC R. Cipra

BME 29000 – Frontiers in Biomedical Engineering**Time / Location:** Fall Semester, 50 minutes, once weekly**Credit:** 1**Restriction:** BME only; sophomore standing**Instructors:** Kinam Park, Professor
Maeve Drummond, Undergraduate Programs Coordinator**Teaching Assistants:** TBD**Required texts:***The MIT Guide to Science and Engineering Communication* by J.G. Paradis and M. Zimmerman, 2002, MIT Press, 2nd Edition.*The Engineer of 2020: Visions of Engineering in the New Century*, National Academy of Engineering, 2004, National Academy Press.**Assessment:** Grading is based on individual written reports and plans, peer-editing, and participation in group discussions. Each attendance and assignment is worth a point value and total accumulated points will determine the course grade. Occasionally in-class quizzes and surveys may be administered, but there are no written exams.**Graded Assignments:**

- Attendance (150 pts)
- Plan of Study (50 pts)
- Resume and Cover Letter (50 pts)
- Informational Interview (100 pts)
- Career Development Report (150 pts)

Bonus Points:

- a) 10 points for completing the end-of-year survey and
- b) 1 point for each BMES club session attended (up to 10)

Grading Scale:

100-97% = A+
 96-93% = A
 92-90% = A-
 89-87% = B+
 86-83% = B
 82-80% = B-
 79-77% = C+
 76-73% = C
 72-70% = C-
 69-67% = D+
 66-63% = D
 62-60% = D-
 Below 60% = F

BME 290 Fall 2010
MJIS 1001 4:30-5:20 Thursdays

Date:	Topic:
8/26	Course Structure/Schedule/Accreditation/Assessment
9/2	Employment Interviewing with CCO
9/9	Informational Interviewing and IR Prep
9/16	NO CLASS - attend poster session instead
9/23	Plan of Study Assignment
9/30	Research areas/electives for depth in an area
10/7	Research areas/electives for depth in an area
10/14	Research areas/electives for depth in an area
10/21	Study Abroad
10/28	Writing a Resume/Group Registration
11/4	Statistics—Industry Applications
11/11	CAD-Industry Applications
11/18	Project Mgmt-Industry Applications
12/2	Presentation skills-Industry and Academia
12/9	Weldon Alumni Panel

